Remarks

The Applicants have amended Claim 1 by including the subject matter of Claim 4 therein. Claim 1 has further been amended to specify that the resin is a polyester resin. Claim 4 has accordingly been cancelled.

The Applicants respectfully request that the above amendments be entered into the Official File inasmuch as the subject matter of Claim 1 as now amended has been fully considered inasmuch the changes incorporate subject matter previously considered, present no new issues and require no further searching. Also, the number of claims has been reduced and the above amendment places the entire Application in condition for allowance.

The Applicants note with appreciation the withdrawal of the rejections based on 35 U.S.C. §102.

The Applicants acknowledge the new rejection of Claims 1 – 6, 11 and 12 under 35 U.S.C. §103 as being unpatentable over the hypothetical combination of Miyakawa with Ishii. The Applicants agree that Ishii discloses a light reflective sheet that is supposedly useful for a number of purposes, including backlight units of liquid crystal displays, among other things. The light reflective sheet of Ishii is formed from a porous resin sheet which is made from polyolefins such as high density polyethylene, low density polyethylene, polypropylene, ethylene propylene and methylpentene. Such polyolefin resins are selected in Ishii because of their ability to successfully disperse large quantities of inorganic filler within the resin. The quantities of inorganic filler that are dispersible within the polyolefin resins of Ishii are quite large. Specifically, the amount of filler that can be added to such polyolefin resins is in the range of from 180 to 300 parts by weight with respect to 100 parts by weight of the polyolefin resin. In other words, two to three times as much

filler, on a weight basis, can be added to a composition including the filler and the resin.

The porous resin sheet of Ishii can also include certain additives such as additives having an ultraviolet absorbing ability, including benzophenone compounds, as helpfully pointed out in the Official Action.

Ishii also discloses that the porous resin sheet can be coated with a protective layer such as a layer of polyester resin. Ishii further mentions that additives such as an ultraviolet absorber and a stabilizer may be added to the protective layer.

The Applicants also agree that Ishii is silent as to the porous resin sheet being made of a polyester resin as recited in the solicited claims. In sharp contrast, Ishii discloses polyolefins--which are not polyesters. Also, Ishii does not disclose, teach or suggest a copolymer of an acrylic or a methacrylic resin with a light stabilizer component.

Miyakawa produces a polyester film reflector for a surface light source. The polyester film is comprised of a polyester white film which contains fine voids in the interior thereof and also contains 2 to 25 weight percent of a filler that is an incompatible polymer with the polyester white film.

The white polyester film is coated with a material that contains 5 – 25 weight percent of inorganic particles. The coating may be made from PET, for example.

Inasmuch as the fundamental concepts of Ishii and Miyakawa are complete different, the Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination as set forth in the Official Action. The reason for this is that one of ordinary skill in the art would not substitute the polyester of Miyakawa for the polyolefin resin of Ishii. One of ordinary skill in the art would not make this hypothetical combination because it is fundamental to

Ishii that the polyolefin resin, which is the base layer for the light reflective sheet, has the ability to contain large quantities of inorganic filler. In sharp contrast, Miyakawa teaches that the white polyester film, which is the base layer for the polyester film reflector of Miyakawa, contains 2 – 25 weight percent of filler. These are drastically different quantities of filler. There are no teachings in either of Miyakawa or Ishii that would lead one of ordinary skill in the art to believe that the polyester of Miyakawa would have the ability to successfully disperse such large amounts of inorganic filler material within the resin. In other words, Ishii teaches that the polyolefin resin is able to absorb about 100 to 200 weight percent of inorganic fillers, compared to the 2 to 25 weight percent of the while polyester film of Miyakawa. These are radically different ranges brought about by radically different materials which would lead one of ordinary skill in the art to have no expectation that the while polyester film of Miyakawa could or would be useful as a substituting material for the polyolefin resin of Ishii.

As a consequence of these teachings, the hypothetical combination fails both aspects of the necessary requirements for combining references, namely, that there be a suggestion to make the modification and that there be a reasonable chance of success in making such a modification. First, there is no teaching or suggestion in either reference that such a substitution should be made. Ishii is quite direct in its teachings that the use of the polyolefin resin is specific for the purpose of dispersing large quantities of inorganic filler. There is utterly no disclosure in either reference that white polyester film could be substituted as is claimed herein. As a consequence, there is inherently no reasonable expectation of success that can be gleaned from either reference. Accordingly, the Applicants respectfully submit that the 35 U.S.C. §103 rejection of Claims 1 – 6, 11 and 12, based

on the hypothetical combination of Miyakawa with Ishii, must fail. Withdrawal of that rejection is respectfully requested.

The Applicants also respectfully submit that the rejection of Claims 1 – 12 based on the reverse combination, namely, the hypothetical combination of Ishii with Miyakawa, also must fail. In that regard, the Applicants agree that Miyakawa is silent as to the so-called "A-layer" of Miyakawa, including a light stabilizer. In sharp contrast, Miyakawa clearly teaches that the A-layer contains a substantial quantity of inorganic particles in an amount of 5 – 25 weight percent.

On the other hand, Ishii discloses in a rather offhand way, without anything more than a passing mention, that additives such as ultraviolet absorber and stabilizers may be added to the "above-mentioned" protective layers. However, these disclosures by both references do not provide teachings or suggestions to those of ordinary skill in the art to utilize a light stabilizer as disclosed by Ishii in the A-layer of Miyakawa.

The primary reason for this is quite simple. Miyakawa's A-layer is already substantially filled with inorganic particles. In sharp contrast, there is no teaching or suggestion that the coating layer of Ishii (which is assumed to be a corresponding layer to the A-layer of Miyakawa) contains any particles at all. Thus, the Miyakawa A-layer is loaded with particles, while the Ishii layer is not. The presence of such particles in Miyakawa completely changes the dynamics of that layer with respect to various of physical characteristics. As a consequence, one of ordinary skill in the art would have no incentive to add, without a specific teaching to do so in the presence of pre-existing particles, another additive to allegedly absorb ultraviolet or stabilize the coating layer. One of ordinary skill in the art would readily expect that the characteristics of the A-layer of Miyakawa would be completely different from the coating layer of Ishii due to the lack of particles and that the

addition of such a UV absorber or stabilizer of Ishii might not be necessary at all because of such changed physical characteristics. For example, the mean reflectants is measured at integrals of 10 nm within a range of 400 – 700 nm in the invention. In contrast, Ishii measures light reflecance by using light beams having wavelengths of 450 to 550 nm as a typical value as taught at Column 18, lines 1 – 9. As such, Ishii utilizes a region which includes a wavelength of 400 nm and is a region influenced by UV. However, in the claimed invention, the influence of UV is considered by virtue of the utilization of the lower range down to 400 nm. Ishii does not do this.

At best, Ishii provides nothing more than the notorious "obvious to try" scenario, which has been strictly forbidden for many years. Thus, faced with the fact that the A-layer of Miyakawa is already fully loaded with particles that inherently change its physical characteristics, there is nothing in Ishii that teaches or suggests that a layer that has no particles, which might have a UV absorber or stabilizer added to it, would have application to a coating layer that already has particles. This would be nothing more than mere speculation, unsupported by actual teachings or suggestions within the reference itself.

The Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination as set forth in the rejection and that Claims 1 – 12 are fully patentable over any such hypothetical combination of Ishii with Miyakawa. Withdrawal of that rejection is respectfully requested.

The Applicants acknowledge the double-patenting rejection of Claims 1 – 6 and 8 – 12 based on the hypothetical combination of Ishii with Miyakawa. The Applicants also note with appreciation that filing a Terminal Disclaimer will overcome that rejection. However, the Applicants do not believe that a Terminal Disclaimer is necessary inasmuch as the hypothetical combination of those

two references is neither taught nor suggested by that hypothetical combination for the reasons articulated above and that Claims 1 – 6 and 8 – 12 are fully patentable over those references, whether taken individually or collectively. Accordingly, the Applicants respectfully request withdrawal of the double-patenting rejection.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully submitted.

Respectfully submitted,

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